



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,318	06/19/2001	Yasushi Hara	P/1912-23	4595

2352 7590 03/22/2004

OSTROLENK FABER GERB & SOFFEN
1180 AVENUE OF THE AMERICAS
NEW YORK, NY 100368403

EXAMINER

BELLO, AGUSTIN

ART UNIT	PAPER NUMBER
----------	--------------

2633

DATE MAILED: 03/22/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.

09/885,318

Applicant(s)

HARA ET AL.

Examiner

Agustin Bello

Art Unit

2633

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3 and 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 3-8 and 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 3 the applicant claims, "wherein between said fixed pattern output by said memory and said unfixed pattern output by said pattern generation circuit, said selection circuit selects said unfixed pattern." However, it is not clear if the applicant is intending to claim that the selector is between the two data formats or whether the selector always selects the unfixed pattern when having to choose between the two patterns.

3. Claims 4, 6-8, and 14 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: a connective relationship between the phase comparison circuit and the selector.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2633

5. Claims 1-9^{and 10-14} *as best understood by the examiner in view of the 112 rejections above*, are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art admitted by the applicant (Figure 3 of the drawings) in view of Segaram (U.S. Patent No. 5,822,325).

Regarding claims 1 and 10, the admitted prior art teaches a circuit for preventing transmission of a fixed pattern of an optical digital transmission equipment, comprising: a memory (reference numeral 102 in Figure 3) for temporarily accumulating a low-order group signal (reference numeral 101 in Figure 3), a multiplexing circuit (reference numeral 110 in Figure 3) for multiplexing an output signal output by said memory with an overhead bit necessary for optical digital transmission. The admitted prior art differs from the claimed invention in that it fails to specifically teach a pattern generation circuit for generating an unfixed pattern having no fixed value and outputting the pattern to said multiplexing circuit. However, coupling a pattern generation circuit generating an unfixed pattern to a multiplexer is well known in the art. Segaram teaches coupling a pattern generation circuit (reference numeral 130 in Figure 2) for generating an unfixed pattern having no fixed value (e.g. random data signal column 3 lines 7-11) and outputting the pattern to said multiplexing circuit (reference numeral 330 in Figure 2). One skilled in the art would have been motivated to couple a pattern generation circuit for generating an unfixed pattern having no fixed value and outputting the pattern to said multiplexing circuit of the admitted prior art in order to prevent unauthorized downstream ports from receiving the data signal. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to couple a pattern generation circuit for generating an unfixed pattern having no fixed value and outputting the pattern to said multiplexing circuit as taught by Segaram in the transmitter of the admitted prior art.

Regarding claim 2, the combination of references teaches that said unfixed pattern (e.g. random pattern of Segaram) is applied to said multiplexing circuit while said memory outputs a fixed pattern (reference numeral 109 in Figure 3 of the admitted prior art).

Regarding claims 3 and 12, the combination of references teaches a selection circuit (reference numeral 240 in Figure 2 of Segaram) connected to said multiplexing circuit and said memory (reference numeral 102 in Figure 3 of the admitted prior art), wherein between said fixed pattern output by said memory and said unfixed pattern output by said pattern generation circuit, said selection circuit selects said unfixed pattern (e.g. random pattern selected when necessary). The combination of references differs from the claimed invention in that it fails to specifically teach that the selector is between the multiplexer and the memory. However, one skilled in the art would clearly have recognized that a selector positioned between the memory and the multiplexer would have been beneficial in that it would have allowed the selection of the signal to be input to the multiplexer. Furthermore, Segaram suggests this concept in that the selector (reference numeral 240 in Figure 2) works in conjunction with the multiplexer to select a single signal to be input to the multiplexer. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have positioned the selector of taught by Segaram between the memory and the multiplexer in the combination of references.

Regarding claims 4, 5, 13, and 14 the combination of references and the admitted prior art in particular teaches a phase comparator (reference numeral 115 in Figure 3) for outputting a reset signal which resets said memory based on a phase difference between a phase of write to said memory and a phase of read from the memory. The combination of references differs from the claimed invention in that it fails to specifically teach that said selection circuit selects said

Art Unit: 2633

unfixed pattern based on said reset signal. However, one skilled in the art would clearly have recognized that since the memory outputs a fixed pattern after a reset, information from the memory not intended to be transmitted to a distant receiver would be output. As such, one skilled in the art would clearly have recognized that the system of Segaram provides a means for interrupting the transmission of unintended data by instead selecting random data to be input and output from the multiplexer. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to select unfixed pattern data (e.g. random) based on said reset signal in the combination of references.

Regarding claims 9 and 11, the combination of references teaches that the unfixed pattern is random (column 3 lines 7-11).

Allowable Subject Matter

6. Claims 6-8 and 15-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rosen, Kendall, Tominaga, Lafferty, and Urbansky present relevant art.

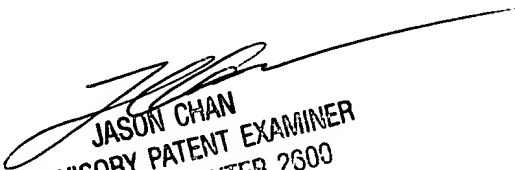
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (703)308-1393. The examiner can normally be reached on M-F 8:30-6:00.

Art Unit: 2633

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703)305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB


JASON CHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600